

Amendments to the Claims

Cancel Claims 10 - 21 and substitute new claims, Claims 22 - 32.

The following listing of claims replaces all prior versions and listings of claims in this application. The new claims are filed in order to overcome the examiner's concerns and to more precisely and concisely claim subject matter in the application to which the applicant is entitled to obtain letters patent. No new subject matter is added by these amendments. The applicant does not waive or abandon any subject matter by these amendments.

The total number of claims now pending is 11, and the total number of independent claims now pending is 1. No adjustment in the filing fee is necessitated by these amendments.

Listing of the Claims

The listing of claims will replace all prior versions, and listings of claims in application:

Claims 1 – 21 (cancelled)

Claim 22 (new)

A pulse combustor, comprising:

- a) a first outer plate or coil;
- b) a second outer plate or coil spaced apart from and substantially parallel to said first outer plate or coil, wherein said second outer plate or coil comprises a hub;
- c) at least one intermediate coil located between and substantially parallel to said first and said second outer plates or coils, wherein said intermediate coil is spaced apart from any adjacent of said intermediate coils and from any adjacent of said first and said second outer plates or coils, whereby tailpipe regions are formed on both sides of said intermediate coil, and wherein said intermediate coil comprises:
 - i a coolant passageway for conducting coolant through the intermediate coil;
 - ii an inlet to said coolant passageway; and,
 - iii an outlet from said coolant passageway;
- d) a combustion chamber between said first and said second outer plates or coils; and,

- e) a burner coupled to said hub, said burner operative to ignite a fuel/air mixture in said combustion chamber.

Claim 23 (new)

A pulse combustor according to Claim 22, wherein said intermediate coil is flat.

Claim 24 (new)

A pulse combustor according to Claim 22, wherein at least one of said first outer plate or coil and said second outer plate or coil comprises a central conical region.

Claim 25 (new)

A pulse combustor according to Claim 22 wherein said inlet of said intermediate coil is at the periphery of said intermediate coil.

Claim 26 (new)

A pulse combustor according to Claim 22 wherein said outlet of said intermediate coil is adjacent the center of said intermediate coil.

Claim 27 (new)

A pulse combustor according to Claim 22, further comprising spacing means for holding each intermediate coil a fixed distance from each adjacent intermediate coil or from each adjacent outer coil or plate.

Claim 28 (new)

A pulse combustor according to Claim 27 wherein the fixed distance is predetermined to equalize gas flow through the tailpipe regions.

Claim 29 (new)

A pulse combustor according to Claim 22 wherein said burner further comprises a cylinder having a surface, an open end, and a closed end, and wherein said burner is coupled to said hub at said open end, and wherein said closed end is proximate said second outer plate or coil.

Claim 30 (new)

A pulse combustor according to Claim 29 wherein said burner further comprises a cone mounted in said cylinder, wherein the base of said cone is proximate said closed end of said cylinder.

Claim 31 (new)

A pulse combustor according to Claim 29, wherein said burner further comprises:

- a) a plurality of radially spaced apart elongated slots extending along a length of said surface of said cylinder; and,

- b) a plurality of elongated nozzle assemblies with each of said nozzle assemblies affixed to said surface and over one of said slots, wherein each of said nozzle assemblies comprises:
 - i) nozzle openings spaced along its length; and,
 - ii) a plenum accessing said nozzle openings.

Claim 32 (new)

A pulse combustor according to Claim 22 wherein said intermediate coil is circular.